

7-2007

# Working Maine: The Labor Market Experiences of the 1998 Graduating Class of Jobs for Maine's Graduates

Maine Department of Labor

Center for Workforce Research and Information

Betty Dawson

*Maine Department of Labor*, [betty.dawson@maine.gov](mailto:betty.dawson@maine.gov)

Amanda Rector

*Maine Department of Labor*, [amanda.rector@maine.gov](mailto:amanda.rector@maine.gov)

John B. Roberts

*Maine Department of Labor*

Follow this and additional works at: [http://statedocs.maine.gov/cwri\\_docs](http://statedocs.maine.gov/cwri_docs)

---

## Recommended Citation

Maine Department of Labor; Center for Workforce Research and Information; Dawson, Betty; Rector, Amanda; and Roberts, John B., "Working Maine: The Labor Market Experiences of the 1998 Graduating Class of Jobs for Maine's Graduates" (2007). *Center for Workforce Research and Information Documents*. Paper 79.

[http://statedocs.maine.gov/cwri\\_docs/79](http://statedocs.maine.gov/cwri_docs/79)

This Document is brought to you for free and open access by the Labor at Maine State Documents. It has been accepted for inclusion in Center for Workforce Research and Information Documents by an authorized administrator of Maine State Documents. For more information, please contact [statedocs@maine.gov](mailto:statedocs@maine.gov).

# Working Maine

The Labor Market Experiences of the 1998 Graduating Class  
of Jobs for Maine's Graduates

An Interim Report



Betty Dawson  
Senior Economic Research Analyst

Amanda Rector  
Economic Research Analyst

John B. Roberts  
Economic Research Analyst

Prepared by:

**MAINE**  
DEPARTMENT OF  
**LABOR**  
*Labor Market Information*

**JMG**  
WE BELIEVE IN MAINE STUDENTS



JOHN ELIAS BALDACCI  
GOVERNOR

STATE OF MAINE  
DEPARTMENT OF LABOR  
DIVISION OF LABOR MARKET INFORMATION SERVICES  
P.O. BOX 259  
AUGUSTA, MAINE  
04332-0259

LAURA A. FORTMAN  
COMMISSIONER

JOHN DORRER  
DIVISION DIRECTOR

# **Working Maine**

## **The Labor Market Experiences of the 1998 Graduating Class of Jobs for Maine's Graduates**

### **An Interim Report**

**Prepared by**

**Maine Department of Labor  
Labor Market Information Services**

**Betty Dawson  
Senior Economic Research Analyst**

**Amanda Rector  
Economic Research Analyst**

**John B. Roberts  
Economic Research Analyst**

**Augusta, Maine**

**July 2007**

The Maine Department of Labor provides equal opportunity in employment and programs.  
Auxiliary aids and services are available to individuals with disabilities upon request.  
Telephone (207) 623-7900, FAX (207) 287-2947, TTY 1-800-794-1110

## **Preface**

The Maine economy is in the midst of significant structural change. A number of traditional industries are declining, while new industries are emerging and adding new jobs. Across the spectrum of Maine workplaces, more is being demanded of workers as new technologies, management innovation, and global competition continue to escalate the knowledge, skills, and abilities required for job performance. These changes pose extraordinary challenges for education and training providers and those responsible for guiding workforce development. A better and more timely understanding of the dynamics of our economy and labor markets is fundamental for effective public policy and sound investment strategies using limited public dollars.

The Maine Department of Labor (MDOL) has initiated a research program to study the effects of the changing economy and its impact on Maine's workforce. In an effort to obtain a more complete picture of how the workforce is adapting to the changing Maine economy, several cohorts of individuals have been identified for more in-depth study. These cohorts can be revisited in the future, allowing us to see impacts on employment and earnings over time. Combining the results from the studies of various cohorts should help policymakers, workforce planners, education and training experts, employers, and workers better understand Maine's changing economy and its implications for workforce development.

Without a doubt, investments in education and training typically lead to both individual and social gain. But, as resources become more limited, policymakers become focused on the scale of returns that different types of investments generate. Investments in skills development are best validated through examination of the employment and earnings experiences of individuals.

This study examines the employment experiences of a group of students who completed the Jobs for Maine's Graduates (JMG) program and graduated from high school in 1998. Using a combination of administrative data from the MDOL and the JMG program, we were able to assemble considerable information about the demographic characteristics, work histories, program experiences, and labor market outcomes of these individuals. The analysis provided in this report is intended to help workforce planners, economic development officials, education administrators, and community leaders formulate more effective strategies and programs for improving the employment outcomes of secondary graduates in the 21<sup>st</sup> century economy.

Major support for this project was provided by the MDOL, Division of Labor Market Information Services (LMIS), through funding from a One Stop Workforce Information grant. JMG's research capacity initiative is supported through the collaborative efforts of the Maine Community Foundation and Common Good Ventures, and the Unity Foundation. Additional major funders include the Davis Family Foundation and the Betterment Fund.

Questions and comments regarding this report should be directed to John Dorrer, Director, or John B. Roberts, Economic Research Analyst, Division of Labor Market Information Services, Maine Department of Labor, PO Box 259, Augusta, Maine, 04332-0259, Telephone (207) 623-7900, TTY 1-800-794-1110.

## Contents

	Page
Introduction .....	1
Methodology.....	2
Economic/Demographic Context .....	4
<i>The Demographics of Maine Youth</i> .....	4
<i>The Changing Structure of the Maine Economy</i> .....	6
Characteristics of the JMG Class .....	10
Employment and Wage Analysis of JMG Participants .....	14
Summary and Conclusions .....	20
Appendix .....	23

## Introduction

Maine's changing economy presents many challenges for those entering the labor market. A combination of forces including rapid technological innovation, intensive foreign competition, and shifting forms of work organization are transforming the nature of work and job performance requirements. At the same time, demographic forces are shaping an aging population and a workforce that is rapidly approaching retirement. This combination of trends will create unprecedented opportunities in the labor market as large numbers of jobs requiring high skills and offering high wages will become available over the next 20 years. A workforce of sufficient size, and possessing the proper qualifications, must be ensured in order to maintain economic vitality and avoid future labor shortages.

Individual workers without the necessary skill sets or opportunities to acquire them are at great risk of being left behind. Skill acquisition and preparation for the world of work, however, are the result of cumulative experience that begins in primary and secondary schools, where the foundations of basic skills and learning disciplines are developed. Students who fall behind in these early stages of the learning process are often relegated to a future of unemployment and low earnings. Training, education, and employability-development efforts that target students who are at risk of dropping out of school or not fully benefiting from the educational experience are becoming more essential to future economic success.

The Jobs for Maine's Graduates (JMG) program (<http://www.jmg.org/>) attempts to do just that. The mission of JMG is "to identify students who face barriers to education, and to guide each one to a successful path toward continued education and a meaningful career." It targets students at risk of dropping out and assists them with completing their education, finding employment, and advancing their careers. The JMG program is the Maine affiliate of Jobs for America's Graduates (JAG), a national school-to-career program. The JMG Board and the Maine Department of Labor (MDOL), Division of Labor Market Information Services (LMIS), entered into a research partnership to gauge the effectiveness of JMG in improving employment outcomes for participants. This study uses Maine wage records to analyze employment outcomes for JMG participants. Furthermore, detailed demographic and program data was linked to wage records to develop a more complete understanding of the relationships between participant characteristics and employment outcomes. The established database and research framework permits ongoing tracking of employment experiences.

This study is designed to answer many questions about the efficacy of the JMG program. It reports details about earnings, employing industries, and overall patterns of labor market experiences of the JMG participants. This study is intended to stimulate additional research and evaluation efforts, so that more about the relationship between program interventions and labor market outcomes may be revealed.

## Methodology

This project had its origins in 2004 when JMG administrators approached the MDOL, LMIS, seeking to identify new sources of data for examining the longitudinal employment experiences and earnings of JMG participants. While JMG maintains an extensive database of administrative and student records, tracking of outcomes and post-program experiences is limited. MDOL's wage records, however, offer considerable details about the employment and earnings records of workers, including JMG participants. Once it was agreed that wage records offered the best and most economical alternative for tracking employment and earnings, JMG and MDOL LMIS staff invested time to understand the program, data sources, and research tools before a formal research strategy was adopted. This shared approach to project planning and management has been an invaluable tool for aligning research efforts with the operational and strategic needs of the program and has resulted in better research products and yielded higher levels of satisfaction for administrators, staff, board members, and important outside constituencies.

The two data sources for this project were administrative records from JMG and wage records from MDOL. JMG provided demographic data along with select educational outcomes for a single class, the graduating class of 1998. This demographic data (age, race/ethnicity, gender, county of residence, living arrangements, etc.) was then matched to the MDOL wage record data. The most recent year of wage records available was used. These records were for the third quarter of 2004 through the second quarter of 2005 and correspond to the seventh year after graduation for the JMG participants. The two original data extracts were combined into a single database for analysis.

In order to combine these two data sets, JMG identified the students from the selected class and sent this list to MDOL along with demographic and educational data. MDOL then took the JMG data and matched it to wage records. These data sets were combined in a Microsoft Access database and used to analyze the employment outcomes of the JMG participants.

Wage records maintained by MDOL provide one of the most effective means for tracking employment and earnings of most workers in Maine. These records are earnings reported, in accordance with Maine Employment Security Law, by employers for each quarter of the year. They also indicate employment tenure and industry affiliation. Monitoring of wage records over time permits the analysis of employment and earnings dynamics. Increasingly, more use is being made of these records, especially when they are linked with student information or other administrative data describing additional characteristics of individual wage earners.

There are some limitations to the data used in this study. The wage records are limited to Maine covered employment, and so exclude anyone who may have been working out of state, in the federal government or in the military, or who may have been self-employed. While no further information is currently available on these workers, the Wage Record Interchange System (WRIS)<sup>1</sup> has recently made provisions to allow states to share wage records for research purposes.

The employment outcomes for JMG participants were examined from two perspectives: employer characteristics, such as geographic location, industry affiliation, number of concurrent jobs, and overall earnings and personal characteristics, such as age, race/ethnicity, gender, county of residence, and living arrangements.

---

<sup>1</sup> Data from the Wage Record Interchange System (WRIS) is currently unavailable for research purposes because WRIS is in transition between entities. Such data should again be available in the near future after administrative details are resolved.



A team of three LMIS analysts collaborated on the organization and analysis of the data. They examined the records and data fields and determined how best to structure the analysis. The following steps describe the data analysis process and the composition of a report detailing its results and findings.

- Imported Microsoft Excel file into Microsoft Access
- Ran queries against Microsoft Access database
- Converted query results into Microsoft Excel tables and graphs
- Analyzed tables and graphs for indication of trends or patterns
- Composed text giving findings from the analysis of the data
- Assembled text, tables, graphs, and charts into a report

During the process of reviewing the records and file structure, questions arose over some of the data definitions as well as some of the actual data entries. Further communication between JMG and LMIS resolved these questions. This dialogue continued throughout the course of the project.

Personal characteristics and earnings data on the JMG participants was compared to similar data from peer groups. Personal characteristics data on JAG participants was compared to the data on JMG participants. Data from the U.S. Census Bureau's Local Employment Dynamics (LED) program was used as a basis for comparing the JMG participants' earnings with that of their peers. Additionally, information from the U.S. Census Bureau's American Community Survey and Decennial Census provided background for setting the economic and demographic context of the study.

## Economic/Demographic Context

### *The Demographics of Maine Youth*

Maine faces significant challenges stemming from demographic changes, both current and future, in its population and workforce. The population of the state is growing slowly, particularly in the younger age groups, which will provide a much smaller pool of workers as the baby boomers begin to retire. (See Table 1.) The state workforce as a percentage of the state population is projected to increase slightly by 2010 and then decrease dramatically through the year 2030. (See Tables I, II, and III in Appendix.) The change will be due primarily to the fact that the number of workers reaching age 65 and presumably exiting the workforce will greatly exceed the number of people expected to enter the workforce, whether as a result of new births or immigration to the state.

**Table 1 - Characteristics of the Population, Maine, 1970 through 2000**

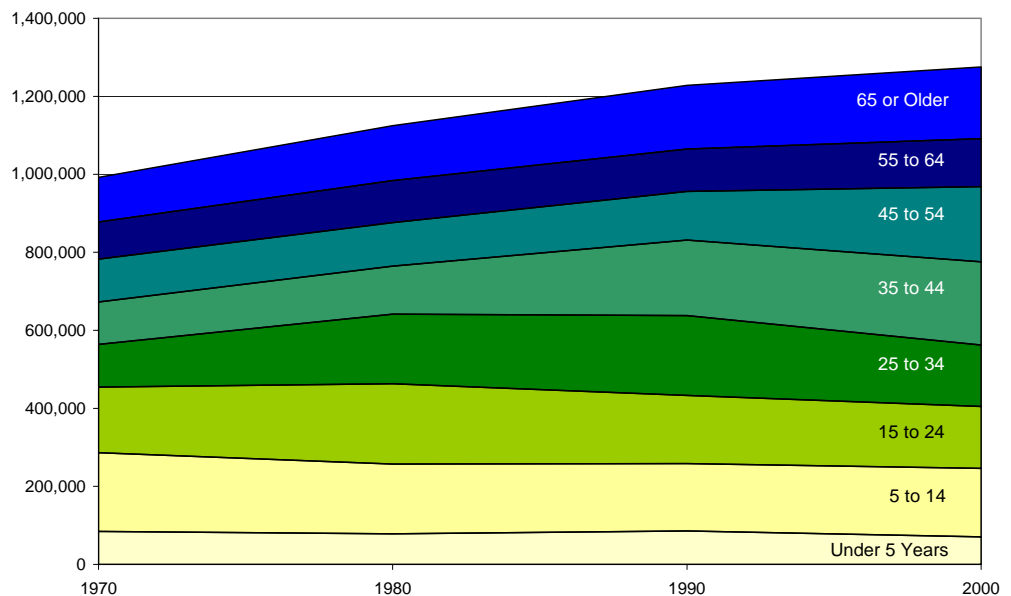
	Total Population	Males	Females	Under 5 Years	5 to 14	15 to 24	25 to 34	35 to 44	45 to 54	55 to 64	65 or Older
<b>1970</b>	992,048	482,865	509,183	84,622	201,359	168,391	109,710	109,027	109,720	94,627	114,592
<b>1980</b>	1,124,660	546,235	578,425	78,514	178,456	205,850	178,799	122,725	112,021	107,377	140,918
<b>1990</b>	1,227,928	597,850	630,078	85,722	173,085	173,967	205,235	193,345	124,751	108,450	163,373
<b>2000</b>	1,274,923	620,309	654,614	70,726	175,274	159,141	157,617	212,980	192,596	123,187	183,402

Source: U.S. Census Bureau

Although the overall population has been increasing over the past decades, growth rates have not been uniform across age groups. (See Figure A.) The most conspicuous demographic phenomenon is the increase in births between 1946 and 1964 known as the “baby boom.” As this cohort passes through the population, it creates a demographic bubble. This bubble is now spread across the 35 to 44, 45 to 54, and 55 to 64 age groups. In 2005, Maine had a median age of 41.2

**Figure A**

**Population by Age Group, Maine, 1970 through 2000**



Source: U.S. Census Bureau

and, by this measure, was the “oldest” state in the nation<sup>2</sup>. As these baby boomers retire and exit the workforce, there will be a dramatic shift in the demand for services, both public and private, in the state. The needs of an older population differ from those of a younger population.

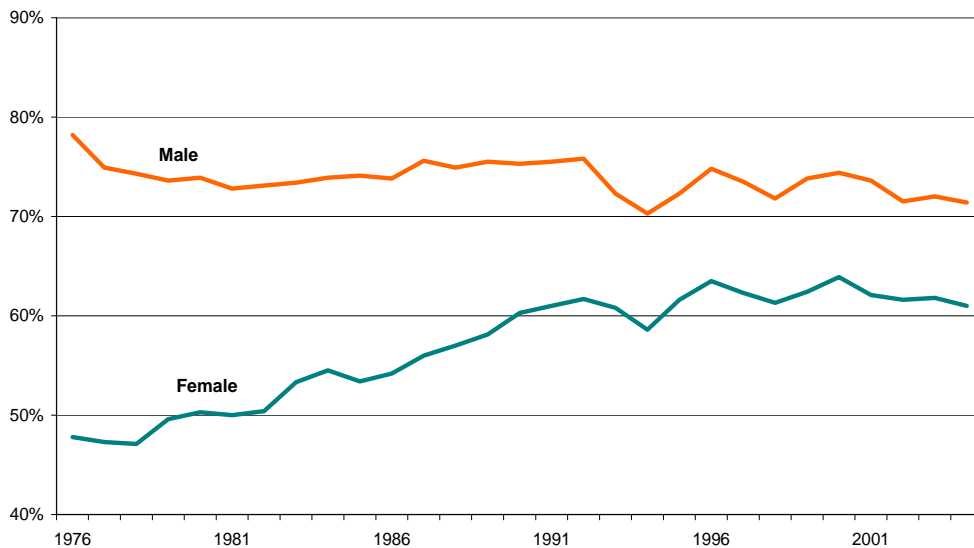
<sup>2</sup> U.S. Census Bureau American Community Survey, 2005

The impact of the aging of the baby boomers is particularly troubling because, between 1990 and 2000, there was a decline in the number of young working-age adults (age 25 to 34) in Maine. The combination of these two demographic trends will create tremendous strain on the Maine economy unless it can be curtailed or reversed.

Additionally, much of the workforce growth in the past has come from increased female participation, which is now starting to level off. During the latter half of the 20<sup>th</sup> century, the rate of female participation in the Maine workforce rose from around 30 percent in 1950 to a peak at 63.9 percent in 2000 and then declined until it stood at 61 percent in 2004<sup>3</sup>. This suggests that future workforce growth based on increased female participation will slow and perhaps even halt. (See Figure B.) This is of particular concern because, since 1950, females have been an increasingly larger segment of the state population.

**Figure B**

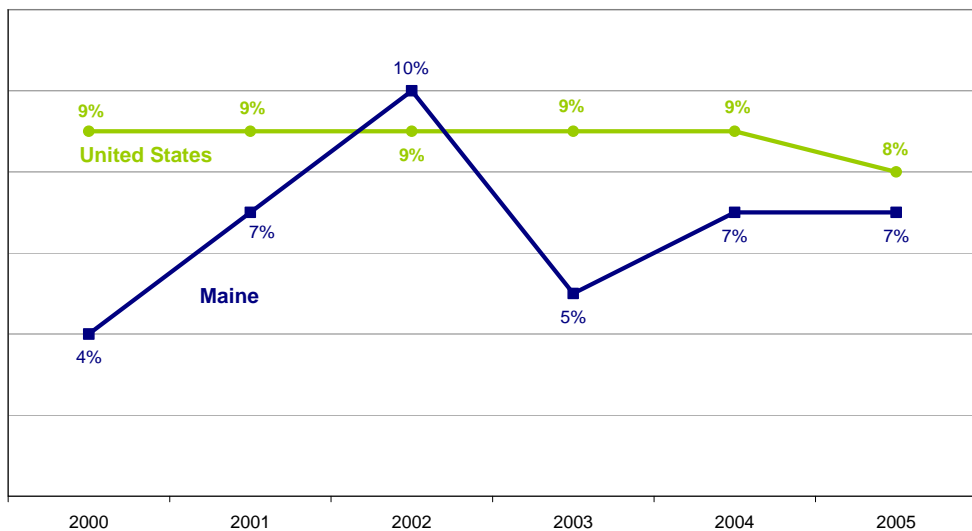
**Labor Force Participation Rates by Gender,  
Maine, 1976 through 2004**



Source: U.S. Bureau of Labor Statistics

**Figure C**

**Percent of Teens Not Attending School and Not  
Working, United States and Maine, 2000 to 2005**



Source: Annie E. Casey Foundation

These trends make it vitally important for the state to utilize as much of its potential labor force as possible. “Disconnected youth”, who are in neither school nor the labor force, are a population who could fill critical gaps in the economy. Historically, Maine’s rate of teens not attending school and not working has been lower than the national figure. But this population remains a significant source of available workers. (See Figure C.) Maine can ill afford to neglect the potential of these individuals to be productive members of the workforce.

<sup>3</sup> *Trends and Implications for the Maine Workforce*, Maine Department of Labor

The JMG participants were in the 24 to 26 age range during the time period for which wage records were examined. Accordingly, the JMG participants were compared to the statewide population, ages 24 to 26. The population in this age range has been decreasing since the 1980s. (See Table 2.)

**Table 2 - Population Characteristics, Maine, Ages 24 to 26, 1970 through 2000**

	<b>Total Population</b>	<b>Males</b>	<b>Females</b>
<b>1970</b>	35,728	17,853	17,875
<b>1980</b>	56,572	27,643	28,929
<b>1990</b>	54,810	27,127	27,683
<b>2000</b>	38,895	19,092	19,803

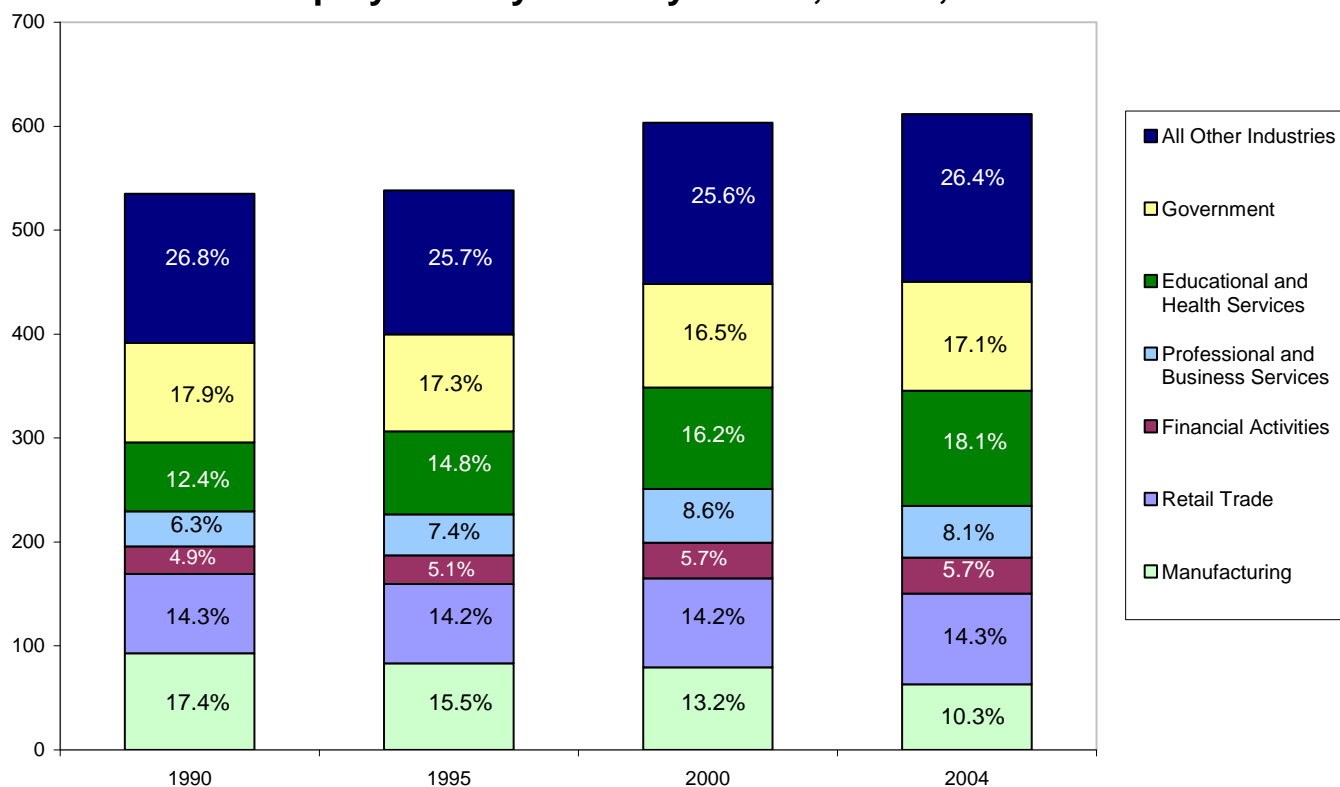
Source: U.S. Census Bureau

### *The Changing Structure of the Maine Economy*

The fundamental structure of the Maine economy has been changing and will continue to change. The traditional industrial base of manufacturing and natural resources is in decline and service-providing industries represent a progressively greater share of the economic activity in the state. (See Figure D.)

**Figure D**

### **Average Annual Nonfarm Wage and Salary Employment by Industry Sector, Maine, 1990 - 2004**



Source: U.S. Bureau of Labor Statistics

Over the next decade, employment growth in Maine will be largely in the sectors of business and consumer services. (See Table 3.) The greatest net growth will be in the Health Care and Social Assistance sector, particularly in those services targeting the aging population of the state.

**Table 3 - Employment By Industry<sup>1</sup> Sector, Maine, 2004 and Projected 2014**

	Average Employment		Employment Change	
	2004	2014	Net	Percent
Arts, Entertainment & Recreation	8,020	9,672	1,652	20.6
Real Estate & Rental & Leasing	7,065	8,459	1,394	19.7
Health Care & Social Assistance	92,569	110,209	17,640	19.1
Accommodation & Food Services	50,649	57,437	6,788	13.4
Professional, Scientific & Technical Services	22,578	25,338	2,760	12.2
Wholesale Trade	21,432	23,849	2,417	11.3
Retail Trade	87,421	97,065	9,644	11.0
Educational Services	9,384	10,362	978	10.4
Administrative & Support & Waste Management & Remediation Services	21,253	23,451	2,198	10.3
Transportation & Warehousing	14,700	16,186	1,486	10.1
Other Services	22,955	24,689	1,734	7.6
Construction	30,773	32,514	1,741	5.7
Finance & Insurance	26,464	27,878	1,414	5.3
Agriculture, Forestry, Fishing & Hunting	5,617	5,868	251	4.5
Government	99,326	102,703	3,377	3.4
Information	11,086	11,446	360	3.2
Mining	109	111	2	1.8
Utilities	1,905	1,820	-85	-4.5
Manufacturing	62,680	54,757	-7,923	-12.6

<sup>1</sup>North American Industry Classification System (NAICS)

Source: Maine Department of Labor, *Maine Employment Outlook, 2004 to 2014*

Projections indicate that the healthcare, social, and personal service occupational groups will be the fastest growing areas through 2014. There will be slight to substantial employment growth in every group except production. There is projected to be a substantial employment decline in the manufacturing sector, but there will still be significant openings in production occupations as workers are needed to replace retirees in essential positions. (See Table 4.)

**Table 4 - Employment by Major Occupational Group, Maine, 2004 and Projected 2014**

	Average Employment		Employment Change	Average Annual Openings		
	2004	2014	Percent	Growth	Replacement	Total
Healthcare Support	19,370	23,248	20.0	388	294	682
Personal Care & Service	23,033	27,123	17.8	409	519	928
Healthcare Practitioners & Technical	36,466	42,922	17.7	646	678	1,324
Community & Social Services	16,574	19,430	17.2	288	315	603
Computer & Mathematical	7,494	8,671	15.7	130	103	233
Legal	4,531	5,136	13.4	61	53	114
Food Preparation & Serving Related	55,054	61,928	12.5	688	2,154	2,842
Protective Service	11,419	12,625	10.6	133	340	473
Arts, Design, Entertainment, Sports, & Media	9,551	10,553	10.5	101	181	282
Building & Grounds Cleaning and Maintenance	27,137	29,876	10.1	275	543	818
Life, Physical, & Social Science	5,036	5,541	10.0	51	116	167
Management	40,582	44,582	9.9	416	723	1,139
Business & Financial Operations	21,953	23,975	9.2	210	394	604
Installation, Maintenance, & Repair	28,441	30,694	7.9	251	654	905
Sales & Related	68,892	74,271	7.8	606	2,217	2,823
Transportation & Material Moving	46,069	48,930	6.2	309	1,005	1,314
Education, Training, & Library	41,141	43,393	5.5	231	876	1,107
Construction & Extraction	40,546	41,563	2.5	162	789	951
Farming, Fishing, & Forestry	8,805	8,923	1.3	35	214	249
Office & Administrative Support	102,596	103,540	0.9	486	2,354	2,840
Architecture & Engineering	9,592	9,619	0.3	32	222	254
Production	44,446	40,557	-8.7	43	1,062	1,105
<b>Total All Occupations</b>	<b>668,728</b>	<b>717,100</b>	<b>7.2</b>	<b>5,954</b>	<b>15,805</b>	<b>21,759</b>

Source: Maine Department of Labor, *Maine Employment Outlook, 2004 to 2014*

There are several major underlying factors which are changing the face of the Maine economy. Among them are the aging of the state's workforce and overall population; the transition from a manufacturing-based to a service-based economy; and the need for an increasingly educated workforce. All of these factors require that new entrants to the workforce be more highly skilled upon entry than their predecessors.

Jobs in the emerging economy will often emphasize a different skill set than those necessary for the manufacturing and natural resource-based sectors that dominated the past century. In the future the most marketable skills will be those required for the projected highest-paying and the fastest-growing occupations. Analysis of marketable skills for the 21<sup>st</sup> century has identified seven broad skill groups that will be in demand. (See Table IV in Appendix.) Three are basic skills: verbal skill, reasoning ability, and math skill. The other four are more directly related to particular occupational groups: technical design skill, human service skill, management skill, and medicine/dentistry knowledge.

The faster growing occupations, both in the service and production sectors, demand greater levels of education and training than the ones that they are replacing<sup>4</sup>. Manufacturing jobs with skills learned through on-the-job training are largely disappearing and are being supplanted by new positions, particularly in the healthcare and professional service areas, which require higher levels of skill and technical knowledge.

While an increasing number of jobs in the emerging economy require post-secondary education or formal training, the greatest number of projected annual openings requires only short-term on-the-job training. (See Table 5.) When the categories readily attainable with a high school diploma, all three categories of on-the-job training, are combined, they represent the majority of the projected average annual openings.

**Table 5 - Projected Job Openings by Education/Training Requirement, 2004 to 2014**

	<b>Number</b>	<b>Percent</b>
First professional degree	253	1.2
Doctoral degree	147	0.7
Master's degree	495	2.3
Bachelor's or higher degree, plus work experience	891	4.1
Bachelor's degree	1,949	9.0
Associate degree	999	4.6
Postsecondary vocational training	1,246	5.7
Work experience in a related occupation	1,450	6.7
Long-term on-the-job training	1,500	6.9
Moderate-term on-the-job training	3,621	16.6
Short-term on-the-job training	9,264	42.6
<b>Total</b>	<b>21,759</b>	<b>100.0</b>

Source: Maine Department of Labor, *Maine Employment Outlook, 2004 to 2014*

<sup>4</sup> Maine Department of Labor, *Maine Employment Outlook, 2004 to 2014*

## Characteristics of the JMG Class

This section examines the characteristics of the JMG participants. The characteristics include age, race/ethnicity, gender, county of residence, and living arrangements as well as data on the educational achievements of the participants' parents.

Personal characteristics data was provided by JMG and was collected during the profiling of students as they entered the JMG program. Data for the JMG class of 1998 was compared to data for the JAG class of 2003. (See Table 6.)

<b>Table 6 - Personal Characteristics of Participants</b>				
	<b>JMG</b>		<b>JAG</b>	
	<b>Number</b>	<b>Percent</b>	<b>Number</b>	<b>Percent</b>
<b>Gender</b>				
Female	288	54.3	6,721	55.1
Male	242	45.7	5,484	44.9
<b>Age at Time of Expected Graduation</b>				
15 to 16	0	0.0	72	0.6
17	0	0.0	2,680	22.0
18	248	46.8	7,639	62.5
19	244	46.0	1,377	11.3
20	31	5.9	144	1.2
21 to 22	0	0.0	36	0.3
Unknown	7	1.3	257	2.1
<b>Race/Ethnicity</b>				
White, Caucasian	487	91.9	6,423	52.6
American Indian	18	3.4	*	*
Asian	7	1.3	*	*
Black, African-American	6	1.1	4,388	36.0
Hispanic	3	0.6	878	7.2
Other <sup>1</sup> or No Response	9	1.7	516	4.2
<b>Total</b>	<b>530</b>	<b>100.0</b>	<b>12,205</b>	<b>100.0</b>

<sup>1</sup>Other includes Multi-Racial as well as any races/ethnicities not listed.

\*For JAG, American Indian and Asian are included in Other along with No Response.

Source: JAG data from Selected Research Reports, Jobs for America's Graduates, July 2005

Forty-six percent of the JMG participants were male and 54 percent were female. There was a slightly lower percentage of females in the JMG program than in the JAG program. JMG participants were slightly older than JAG participants. The youngest JMG participants were 18 at the time of expected graduation while 22 percent of the JAG participants were only 17. Forty-six percent of the JMG participants were 19 at the time of expected graduation, compared to 11 percent of the JAG participants.

The race/ethnicity breakdown among JMG participants varies from that of JAG participants primarily in the relative percentage of Caucasians and African-Americans. However, this is simply reflective of the racial composition for the state of Maine as reported by the U.S. Census Bureau. (See Table V in Appendix.)



A majority of participants lived in a two-parent household. (See Table 7.) Nearly one-third of the participants lived in a single parent household with their mother.

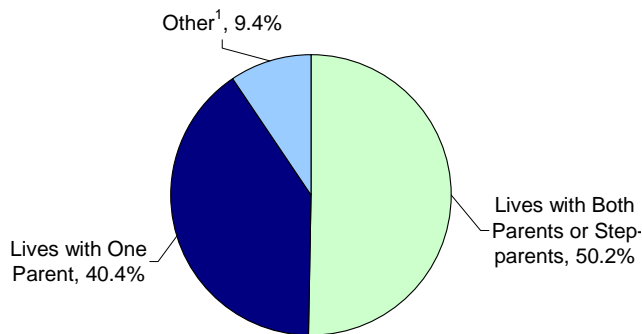
<b>Table 7 - Living Arrangements of All Participants</b>		
	<b>Number</b>	<b>Percent</b>
Lives with Both Parents or Step-parents	266	50.2
Lives with Father	42	7.9
Lives with Mother	172	32.5
Lives with Friends	20	3.8
Lives with Other Relative	24	4.5
Other <sup>1</sup>	6	1.1
<b>Total</b>	<b>530</b>	<b>100.0</b>

<sup>1</sup>Other includes participants living alone, with foster parents or a spouse, or in a group home.

The distribution of participants by living arrangements in JMG participants is very similar to that for JAG participants. (See Figures E and F.)

**Figure E**

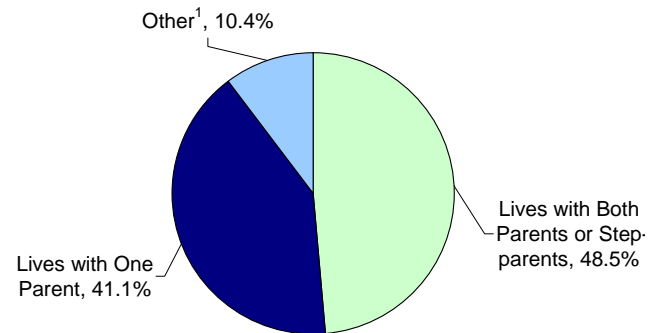
**Percentage Distribution of JMG Participants by Living Arrangement**



<sup>1</sup> Other includes participants living alone, with a spouse, foster parents, friends, other relatives, or in a group home.

**Figure F**

**Percentage Distribution of JAG Participants by Living Arrangement**



<sup>1</sup> Other includes participants living alone, with a spouse, foster parents, friends, other relatives, or in a group home.

Source: Selected Research Reports, Jobs for America's Graduates, July 2005

**Table 8 - Family Size of JMG Participants and Total Population in Family Households**

	<b>JMG</b>		<b>Total Population</b>	
	<b>Number</b>	<b>Percent</b>	<b>Number</b>	<b>Percent</b>
One	*	*	N/A	N/A
Two	50	9.4	159,193	46.5
Three	151	28.5	78,669	23.0
Four	166	31.3	68,496	20.0
Five	94	17.7	26,108	7.6
Six	43	8.1	7,398	2.2
Seven or More	24	4.5	2,567	0.7
<b>Total</b>	<b>530</b>	<b>100.0</b>	<b>342,431</b>	<b>100.0</b>

\*Data does not meet Federal or State disclosure criteria but is included in the Total row.

Source: Total Population data from the U.S. Census Bureau

Over three-fourths of the participants lived in families of three to five members. (See Table 8.) It should be noted that in the population figures provided by the U.S. Census Bureau the two-member households include couples with no children.

More than 42 percent of the participants lived in one of three counties: Cumberland, Aroostook, or Androscoggin. (See Table 9.) Participants came from all Maine counties except Knox County and represented 30 different JMG programs. The JMG programs were established in areas where significant numbers of at-risk youth were present, not necessarily in areas with the greatest overall population. Therefore, because the home counties of the JMG participants were dependent on and reflective of the locations of the JMG programs, the dispersal of the JMG participants did not closely match the geographic distribution of overall population in the state.

**Table 9 - County of Residence of JMG Participants and Total Population**

	JMG Participants		Total Population	
	Number	Percent	Number	Percent
Cumberland	93	17.6	265,612	20.8
Androscoggin	66	12.5	103,793	8.1
Aroostook	66	12.5	73,938	5.8
Washington	44	8.3	33,941	2.7
Kennebec	43	8.1	117,114	9.2
Oxford	41	7.7	54,755	4.3
York	40	7.5	186,742	14.6
Penobscot	35	6.6	144,919	11.4
Waldo	30	5.7	36,280	2.8
Piscataquis	17	3.2	17,235	1.4
Lincoln	14	2.6	33,616	2.6
Somerset	13	2.5	50,888	4.0
Franklin	9	1.7	29,467	2.3
Sagadahoc	7	1.3	35,214	2.8
Hancock	6	1.1	51,791	4.1
Knox	0	0.0	39,618	3.1
Unknown	6	1.1	0	0.0
<b>Total</b>	<b>530</b>	<b>100.0</b>	<b>1,274,923</b>	<b>100.0</b>

Source: Total Population data from the U.S. Census Bureau

There was a wide range of educational achievements reported for the JMG participants' parents. (See Table 10.) For the majority of the participants, at least one parent had earned a high school diploma or the equivalent. More than one-fourth, or 143, of the participants had at least one parent who had completed college. For just less than half, or 264, of the participants, neither parent had attended college.

**Table 10 - Educational Achievement of Participants' Parents**

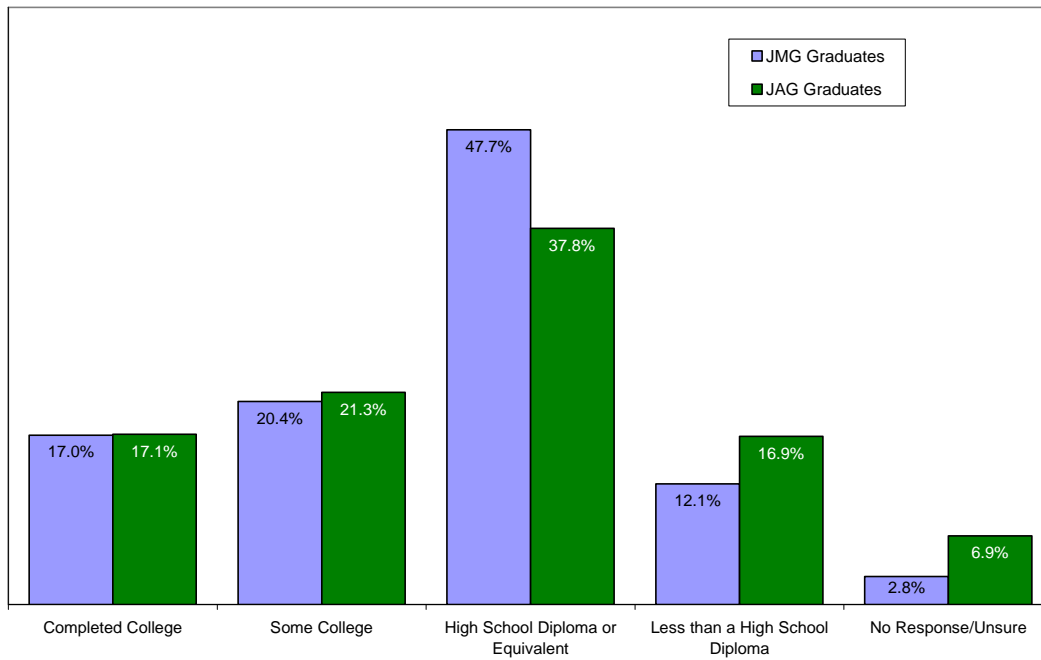
	Mother				
	Completed College (90)	Some College (108)	High School Diploma or Equivalent (253)	Less than a High School Diploma (64)	No Response/ Unsure (15)
<b>Father</b>					
Completed College (91)	38	25	19	7	*
Some College (85)	21	24	37	*	*
High School Diploma or Equivalent (233)	22	34	150	24	3
Less than a High School Diploma (68)	6	12	29	21	0
No Response/Unsure (53)	3	13	18	10	9

\*Data does not meet federal or state disclosure criteria but is included in the totals.

The JMG participants' parents had attained greater educational success than the parents of the JAG participants. (See Figures G and H.)

**Figure G**

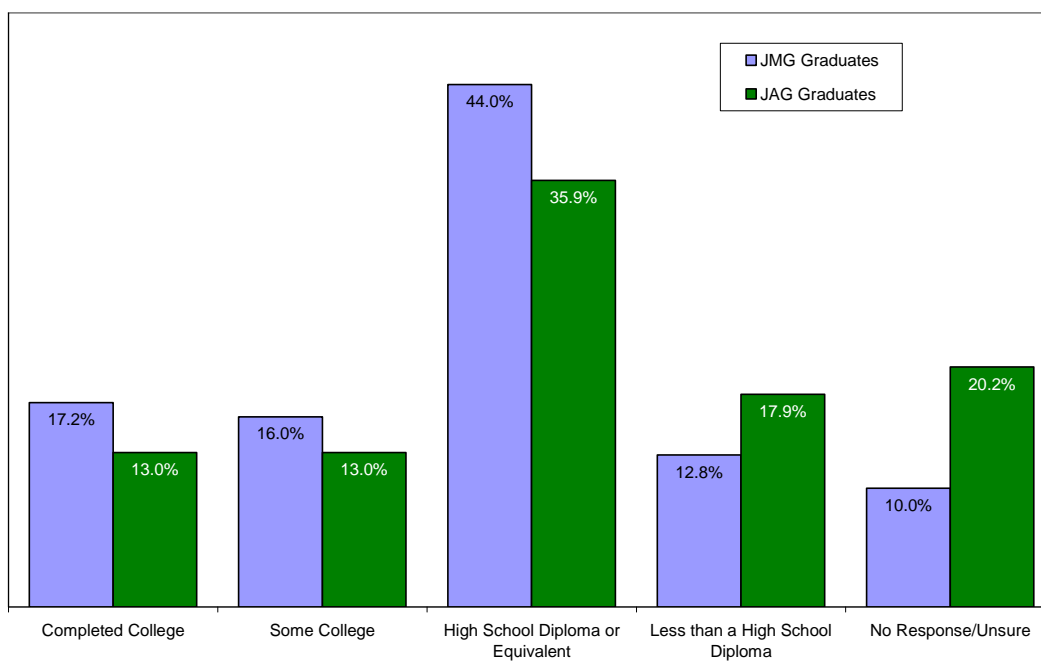
**Educational Achievement of Participants' Mothers, JMG and JAG**



Source: JAG Graduates data from Selected Research Reports, Jobs for America's Graduates, July 2005

**Figure H**

**Educational Achievement of Participants' Fathers, JMG and JAG**



Source: JAG Graduates data from Selected Research Reports, Jobs for America's Graduates, July 2005

## Employment and Wage Analysis of JMG Participants

The characteristics of the JMG participants having been identified, this next section examines their employment experiences and groups those experiences according to selected criteria. The criteria were divided into two types: characteristics of the participants themselves and characteristics of their employment. Each characteristic was examined for the extent of its impact on earnings.

This analysis of employment and wage outcomes for the JMG participants is based upon Maine wage records. Wage records provide important information on employment and earnings of workers. However, due to the nature of wage records, individuals could have wages from both covered and non-covered employment. In such instances, the omission of wages from non-covered employment would cause their overall wages to appear artificially low. For example, an individual might show total wages of \$4,000 in a quarter, using the data from the wage records, but have an additional \$3,000 of wages that quarter from self-employment. Therefore, the individual's true quarterly earnings would be \$7,000 but, from the wage record data, the quarterly earnings would appear to be only \$4,000.

Data from covered employment wage records revealed that 341 of the 530 participants drew wages in Maine during the study period. (See Table 11.) The terms current employment and wages, as used in this report, refer to activity during the study period, the third quarter of 2004 through the second quarter of 2005.

<b>Table 11 - Employment of Participants</b>		
	<b>Number</b>	<b>Percent</b>
Employed	341	64.3
Not Employed	189	35.7
<b>Total</b>	<b>530</b>	<b>100.0</b>

The gender distribution of those participants with wages was almost identical to that of all participants, as well as to all Maine workers, ages 22 to 24. (See Table 12.) The JMG class overall was 54.3 percent female, while among those employed, 54.0 percent were female. The average quarterly wage was significantly higher for males than for females, with females earning 76 cents for every dollar males earned. This ratio is similar to the "gender earnings gap" in the Maine workforce overall. Among all Maine workers, ages 22 to 24, females earned 79 cents for every dollar males earned.

<b>Table 12 - Average Quarterly Wages by Gender</b>						
	<b>JMG</b>			<b>All Maine Workers, Ages 22 to 24</b>		
	<b>Number</b>	<b>Percent</b>	<b>Average Quarterly Wage (\$)</b>	<b>Number</b>	<b>Percent</b>	<b>Average Quarterly Wage (\$)</b>
Female	184	54.0	4,618.32	17,197	52.4	4,324.50
Male	157	46.0	6,052.62	15,637	47.6	5,474.25
<b>Total</b>	<b>341</b>	<b>100.0</b>	<b>5,273.83</b>	<b>32,834</b>	<b>100.0</b>	<b>4,867.50</b>

Source: All Maine Workers, Ages 22 to 24, data from the U.S. Census Bureau, Local Employment Dynamics (LED) database

Participants who were employed at the time of profiling were more likely to have current wages during the study period and had an employment rate of 66 percent compared to a 62 percent employment rate among those not employed at the time of profiling. (See Table 13.) However, those not employed at the time of profiling earned a slightly higher average quarterly wage.

<b>Table 13 - Average Quarterly Wages by Employment at Time of Profiling</b>					
	<b>All Participants</b>		<b>Participants with Current Wages</b>		
	<b>Number</b>	<b>Percent</b>	<b>Number</b>	<b>Percent</b>	<b>Average Quarterly Wage (\$)</b>
Employed at Time of Profiling	281	53.0	186	54.5	5,221.52
Not Employed at Time of Profiling	249	47.0	155	45.5	5,338.08
<b>Total</b>	<b>530</b>	<b>100.0</b>	<b>341</b>	<b>100.0</b>	<b>5,273.83</b>

Family composition and employment status of a participant's parents did not have a dramatic impact on that participant's current employment. (See Table 14.) Employment in each subgroup was between 62 and 72 percent, except in of two subgroups: "Lives with Both Parents, Neither Parent Employed or Employment Unknown" and "Lives with Both Parents, Mother only Employed." Each of these two subgroups represented less than five percent of the total participants.

<b>Table 14 - Employment Status of Participants' Parents</b>				
	<b>Number of Participants</b>	<b>Number with Wages</b>	<b>Percent with Wages</b>	<b>Average Quarterly Wage (\$)</b>
<b>Lives with Both Parents</b>	<b>266</b>	<b>170</b>	<b>63.9</b>	<b>5,408.70</b>
Both Parents Employed	222	141	63.5	5,546.01
Mother Only Employed	10	8	80.0	4,896.58
Father Only Employed	27	17	63.0	4,970.89
Neither Parent Employed or Employment Unknown	7	4	57.1	3,233.19
<b>Lives with Mother Only</b>	<b>172</b>	<b>110</b>	<b>63.9</b>	<b>4,857.18</b>
Mother Employed	141	88	62.4	5,027.79
Mother Not Employed	31	22	71.0	4,163.37
<b>Lives with Father Only</b>	<b>42</b>	<b>30</b>	<b>71.4</b>	<b>6,616.85</b>
Father Employed	40	28	70.0	6,629.29
Father Not Employed	*	*	*	*
<b>Lives with Neither Parent or No Response</b>	<b>50</b>	<b>31</b>	<b>62.0</b>	<b>4,581.73</b>
<b>Total</b>	<b>530</b>	<b>341</b>	<b>64.3</b>	<b>5,273.83</b>

\*Data does not meet federal or state disclosure criteria but is included in the Total row.

The highest wages were earned by those individuals in the "Lives with Father Only, Father Employed" subgroup. The subgroup with the lowest wages was "Lives with Both Parents, Neither Parent Employed or Employment Unknown." There were very few members in this last subgroup, however.

The degree of educational attainment achieved by the parents of any given JMG participant does not seem to have had a significant effect on that participant's employment outcome. (See Table 15.) There may be a discernable influence but the number of participants in each subgroup is so small that it is difficult to have confidence in any of the findings. Any trend also may become clearer as the participants spend more time in the labor force.

**Table 15 - Average Wages by Educational Achievement of Participants' Parents**

	Mother				
	Completed College (\$5,408.67)	Some College (\$5,453.78)	High School Diploma or Equivalent (\$5,093.47)	Less than a High School Diploma (\$5,412.29)	No Response/Unsure (\$4,368.36)
<b>Father</b>					
Completed College (\$5,110.21)	4,966.83	5,799.22	5,394.98	2,625.57	*
Some College (\$5,508.56)	6,039.74	5,450.04	4,479.83	*	*
High School Diploma or Equivalent (\$5,356.86)	5,892.00	5,494.57	5,264.92	5,396.14	*
Less than a High School Diploma (\$5,283.74)	5,326.45	5,443.05	4,641.68	6,099.74	N/A
No Response/Unsure (\$4,846.95)	2,971.97	4,457.97	5,925.93	4,968.11	3,421.60

\*Data does not meet federal or state disclosure criteria but is included in the totals.

There may be a correlation between educational achievements of the participants' parents and that of the participants themselves, but any such correlation likely will not become clear until all participants have finished their education and spent time in the labor force. The effects of any further post-secondary educational achievements by the participants cannot be examined, due to the lack of data.

At the time of profiling less than one-fourth of the participants lived in households receiving government assistance. (See Table 16.) In general, receipt of government assistance seems to have had little impact on current employment status. The average quarterly wage was, however, 14.8 percent higher for participants who were not receiving government assistance.

**Table 16 - Government Assistance at Time of Profiling**

Government Assistance	All Participants		Participants with Current Wages		
	Number	Percent	Number	Percent	Average Quarterly Wage (\$)
Received	123	23.2	81	23.8	4,735.59
Did Not Receive	407	76.8	260	76.2	5,436.63
<b>Total</b>	<b>530</b>	<b>100.0</b>	<b>341</b>	<b>100.0</b>	<b>5,273.83</b>

Analysis of employment by number of employers strongly suggests that job stability leads to higher earnings. The average wage for those with current employment was \$5,273.83 and, for those with the same employer for all four quarters, the average was \$6,143.00. (See Table 17.)

**Table 17 - Same Employer All Four Quarters**

	Number	Percent	Average Quarterly Wage (\$)
Yes	196	57.5	6,143.00
No	145	42.5	3,697.20
<b>Total</b>	<b>341</b>	<b>100.0</b>	<b>5,273.83</b>

For employed individuals, those who had fewer employers in a quarter earned a higher average. (See Table 18.) Even though some of those with multiple employers probably held multiple jobs at some point in a quarter, those with fewer employers in a quarter had higher quarterly wages.

**Table 18 - Maximum Number of Employers in Any Given Quarter**

Number of Employers	Number	Percent	Average Quarterly Wage (\$)
1	214	62.8	5,366.44
2	103	30.2	5,209.43
3 or More	24	7.0	4,787.65
<b>Total</b>	<b>341</b>	<b>100.0</b>	<b>5,273.83</b>

**Table 19 - Total Number of Employers During Year**

Number of Employers	Number	Percent	Average Quarterly Wage (\$)
1	191	56.0	5,625.03
2	92	27.0	5,372.99
3	39	11.4	4,051.07
4	14	4.1	4,580.59
5 or More	5	1.5	2,475.48
<b>Total</b>	<b>341</b>	<b>100.0</b>	<b>5,273.83</b>

Individuals with a single employer in the year averaged quarterly wages of \$5,625.03. For those with multiple employers, average wages decreased as the number of employers increased. (See Table 19.) The exception was those with four employers; their average wages were less than those with two employers but more than those with three employers.

Average earnings for JMG participants revealed a “mobility premium.” Mobility premium is the added wage benefit individuals realize by accepting employment in a location outside their county of residence (in this case, as of the time of profiling). (See Table 20.) Overall, participants employed in a county other than the one in which they had been living earned average quarterly wages that were 6.5 percent higher than those who remained in the same county. However, participants who remained in Cumberland, Piscataquis, or York counties earned higher average quarterly wages than those who found employment in a different county.

**Table 20 - Average Quarterly Wages by Mobility and County of Residence**

	Employed in County of Residence		Employed in Other County	
	Number	Average Quarterly Wage (\$)	Number	Average Quarterly Wage (\$)
Androscoggin	20	5,050.86	25	6,090.77
Aroostook	21	4,222.31	28	5,880.95
Cumberland	38	5,241.84	20	4,766.28
Franklin	*	*	5	4,143.12
Hancock	3	4,343.33	*	*
Kennebec	7	5,321.75	13	5,850.93
Lincoln	6	5,003.55	4	5,863.57
Oxford	9	4,658.06	22	5,225.61
Penobscot	10	5,637.77	11	5,755.83
Piscataquis	3	4,181.69	10	4,117.32
Somerset	4	4,301.42	6	4,330.57
Waldo	*	*	11	5,598.21
Washington	12	5,059.02	13	6,262.44
York	17	6,196.00	13	5,870.23
Unknown	0	0.00	3	2,673.77
<b>Total**</b>	<b>154</b>	<b>5,095.21</b>	<b>187</b>	<b>5,424.68</b>

\*Data does not meet federal or state disclosure criteria but is included in the Total row.

\*\*Included in the total are counties with no employment or nondisclosable employment

More JMG participants found employment outside their high school county of residence than did within their county of residence. (See Table 21.) This was true for all counties except Cumberland, Hancock, Lincoln, and York. However, in several cases, the largest number of participants were working for employers with multiple or statewide locations (indicated as “Unknown” county of residence), making it difficult to determine precisely where each of those individuals was physically employed.

**Table 21 - Mobility by County of Residence**

<b>County of Residence</b>	<b>Did Most Participants Stay in or Leave the County of Residence?</b>	<b>Largest Number of Participants Moved To</b>	<b>Largest Number of Participants Moved From</b>
Androscoggin	leave	Cumberland	Oxford
Aroostook	leave	Other*	Various
Cumberland	stay	Other*	York
Franklin	leave	Kennebec	Various
Hancock	stay	Various	Penobscot
Kennebec	leave	Cumberland	Cumberland
Lincoln	stay	Cumberland	Penobscot
Oxford	leave	Androscoggin	Androscoggin
Penobscot	leave	Other*	Various
Piscataquis	leave	Penobscot	N/A
Sagadahoc	leave	Other*	Various
Somerset	leave	Penobscot	Oxford
Waldo	leave	Penobscot	Aroostook
Washington	leave	Penobscot	Aroostook
York	stay	Cumberland	Oxford
Unknown	N/A	Various	N/A

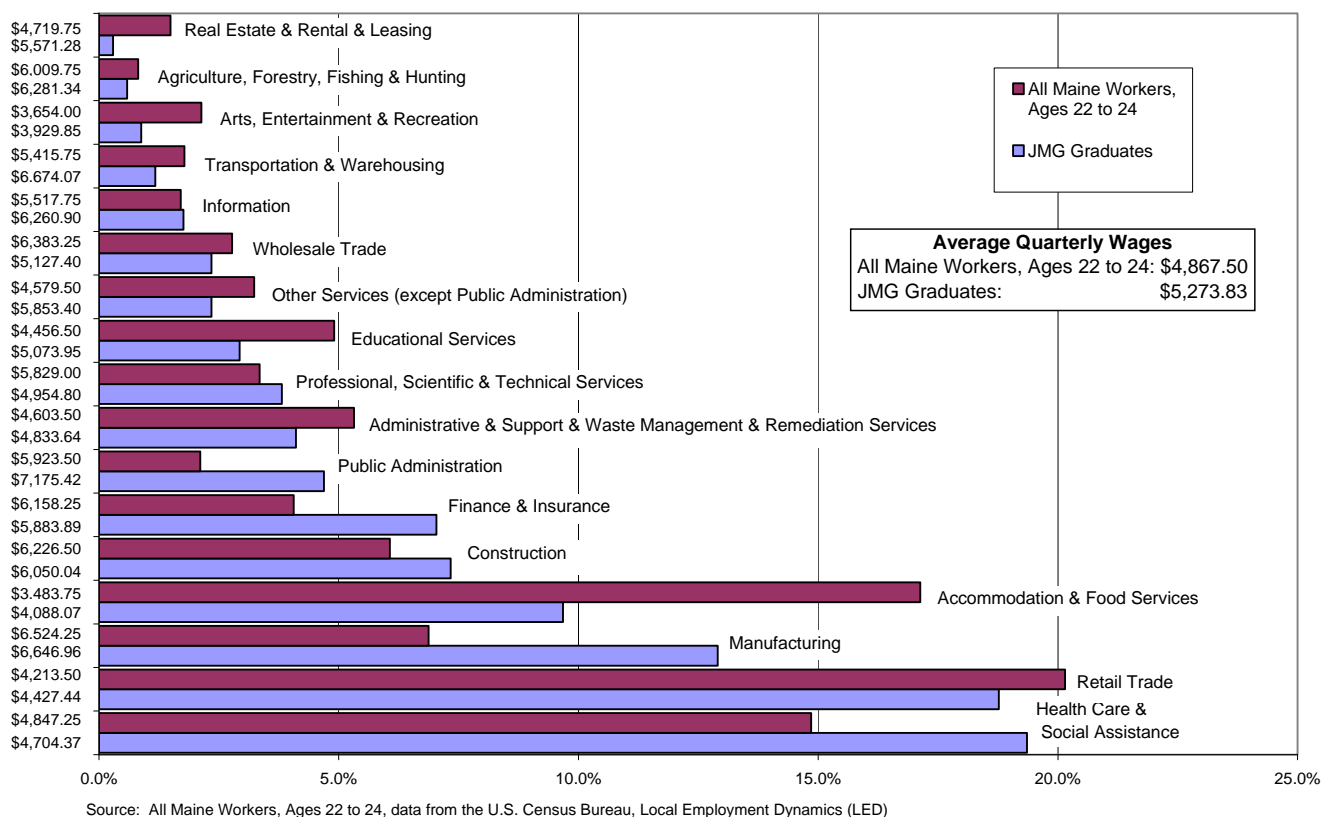
\*Other indicates that an individual was working for an employer with multiple or statewide locations.



Distribution of employment by North American Industry Classification System (NAICS) sector for JMG participants differed to some degree from that of all Maine workers, ages 22 to 24. (See Figure I.) In both groups, workers were most commonly employed in manufacturing, retail trade, accommodation and food services, or health care and social assistance. The most common employment sector for JMG participants was health care and social assistance, followed by retail trade. Among all Maine workers, the most common sector was retail trade, followed by accommodation and food services.

The average quarterly wage for the JMG participants was \$5,273.83. This exceeded the average for all Maine workers, ages 22 to 24, by eight percent. Within this age group, the JMG participants exceeded the average wage in the majority of industry sectors. The exceptions were wholesale trade, finance and insurance, construction, healthcare and social assistance, and professional, scientific, and technical services.

**Figure I**  
**Employment Distribution by Industry for 1998 JMG Participants and All Maine Workers, Ages 22 to 24**



The JMG participants, for the most part, are situated in industries that are projected to grow in Maine over the next decade. (See Table 3.) More than half of these JMG participants are working in one of the four sectors projected to add the greatest net number of workers by 2014: health care and social assistance, retail trade, accommodation and food services, and government. About 13 percent of the JMG participants are employed in manufacturing, a sector projected to decline over the next decade. However, their future employment prospects are not as bleak as they may appear, because there will be opportunities in that sector as companies replace retiring workers. For example, the MDOL has projected 1,105 average annual openings in production occupations in Maine until 2014.

## Summary and Conclusions

The emerging economy in Maine presents many challenges for those in education and government who are dedicated to preparing the individuals who will constitute our future labor force. Economic trends make it vitally important for the state to utilize as much of its potential labor force as possible. The population of Maine, and the entire country, is aging and this has important implications for the labor force. Maine cannot afford to neglect the potential of disconnected youth as productive members of the workforce. For this reason, programs such as those provided by JMG are vitally important to Maine's future.

In the 21<sup>st</sup> century, as individuals enter the Maine workforce, they will find a landscape far different from that which previous generations have found. Maine's traditional industries, based on natural resource extraction and manufacturing, are shrinking and service industries, including health, business, and professional services, are growing. The average job will require a higher level of education and training in the emerging economy than it did in the past. There will still be many entry level jobs requiring either short- or medium-term, on-the-job training but there will be fewer of these positions than in the past.

The size of the labor force will decline as a proportion of the total population. Trend analysis clearly demonstrates that, over the next few decades, retirees from the labor force will outnumber new entrants. In order to ameliorate the transition to a shrinking workforce, it will be necessary to expand participation in the labor force and better equip labor force entrants so that they may more readily secure employment. One strategy for expanding the workforce is to realize greater participation and employment for "disconnected youth," ages 16 to 19, who are neither employed nor in school.

The JMG program is dedicated to serving students most at risk of failing to achieve a level of education necessary to participate fully in the future workforce. The MDOL and JMG have collaborated in establishing a research program to evaluate the performance of the JMG program in influencing the employment outcomes for JMG participants. The primary goal of this study was to examine the long-term labor market outcomes for participants of the JMG program. Many significant observations have come from this initial analysis.

- The average quarterly wage for the JMG participants was \$5,273.83. This exceeded the average for all Maine workers, ages 22 to 24, by eight percent.
- There was a slightly lower percentage of females in the JMG program than in the JAG program. Both groups had more female than male participants.
- The majority of the participants lived in a two-parent household.
- More than 42 percent of participants lived in Cumberland, Androscoggin, or Aroostook counties.
- JMG females earned 76 cents for every dollar JMG males earned, while females in the Maine workforce, ages 22 to 24, earned 79 cents for every dollar males earned.
- Participants with a job at the time of profiling were more likely to have current wages.
- Analysis of employment by the number of employers strongly suggests that job stability leads to higher earnings.
- For those employed, the fewer the number of employers in a quarter, the higher the average quarterly wage. The average wage decreased as the number of employers increased.
- There was a mobility premium of 6.5 percent for JMG participants.

Our analysis shows a powerful convergence of demographic and economic forces demanding that serious attention be paid to education, training, and workforce development to support the growth of the Maine

economy. In sum, JMG has demonstrated success in reaching young people who are “at risk” of dropping out of school and setting them on course for sustainable employment and higher earnings. Our findings suggest that JMG participants:

- Earn more than the majority of their contemporaries;
- Move into industries that show growth and potential for increased earnings;
- Tend to relocate from regions with declining employment opportunities; and
- Realize higher earnings the longer their tenure with an employer.

These important lessons should be incorporated into the JMG curriculum, passed on to instructors, and shared with future JMG students. Furthermore, based on our projections of where the Maine economy is heading, the fastest-growing and highest-paying occupations involve knowledge and skills acquired through post-secondary education. JMG participants should be encouraged, not only to graduate from high school and go to work, but to continue on to post-secondary education and training. Further research should include analysis of the labor market experiences of JMG participants who enter post-secondary education and training. Such additional information would add substantial value to the growing body of knowledge about the work of the JMG program and the impact of further education and training on employment and earnings for JMG participants.

## **Appendix**

## *Definitions*

**Maine covered employment** refers to those individuals with wages reported by employers under the Maine Employment Security Law. This law excludes a number of different groups of workers, such as the self-employed, federal employees, and individuals working in other states. These individuals are classified as “not employed” within the wage record data, along with any workers who were searching locally for a suitable job or chose to retire or otherwise leave the labor force. Therefore, we have no further employment information on these individuals.

The **Local Employment Dynamics (LED)** data counts the total number of workers who were employed by the same employer in both the current and previous quarter. However, jobs, rather than individuals, are counted. For example, a single individual could be employed by two employers in a quarter. This would lead to an employment count of two for this single individual.

**Current wages** are earnings reflected in Maine wage records. Specifically, for the purposes of this study, current wages are earnings from the third quarter of 2004 through the second quarter of 2005.

**Mobility premium** is the added wage benefit individuals realize by accepting employment in a location outside their county of residence (at the time of profiling). The mobility premium is calculated by subtracting the average wage of individuals employed within their county of residence from the average wage of individuals employed outside their county of residence and dividing the difference by the average wage of individuals employed within their county of residence. Individuals employed outside their county of residence may have moved or may be commuting. The mathematical expression is:

$$\frac{\text{Go} - \text{Stay}}{\text{Stay}}$$

where “Go” = average quarterly wage of individuals employed outside their county of residence and  
“Stay” = average quarterly wage of individuals employed within their county of residence.

## References

Maine Employment Security Law, M.R.S.A., Title 26, Chapter 13.

U.S. Census Bureau, 1970 Census of Population, "Age by Race and Sex: 1900 to 1970," [www2.census.gov/prod2/decennial/documents/1970a\\_me-01.pdf](http://www2.census.gov/prod2/decennial/documents/1970a_me-01.pdf), accessed 10/11/2006. (Tables 1 and 2, and Figure A.)

U.S. Census Bureau, 1980 Census of Population, "Age by Race and Sex: 1910 to 1980," [www2.census.gov/prod2/decennial/documents/1980a\\_meABCD-03.pdf](http://www2.census.gov/prod2/decennial/documents/1980a_meABCD-03.pdf), accessed 10/11/2006. (Tables 1 and 2, and Figure A.)

U.S. Census Bureau, 1990 Census of Population and Housing, Summary Tape File 1, [factfinder.census.gov](http://factfinder.census.gov), accessed 10/11/2006. (Tables 1 and 2, and Figure A.)

U.S. Census Bureau, 2000 Census of Population and Housing, Summary Tape File 1, [factfinder.census.gov](http://factfinder.census.gov), accessed 10/11/2006. (Tables 1, 2, and 9, and Figure A.)

U.S. Census Bureau, American Community Survey, 2005.

*Trends and Implications for the Maine Workforce*, Maine Department of Labor.

U.S. Bureau of Labor Statistics. (Figures B and D.)

Annie E. Casey Foundation, State Level Data Online, [www.kidscount.org](http://www.kidscount.org), accessed 1/9/2007. (Figure C.)

Maine Department of Labor, Labor Market Information Services, *Maine Employment Outlook, 2004 to 2014*, issued September 2006. (Tables 3, 4, and 5.)

Selected Research Reports, Jobs for America's Graduates, July 2005. (Table 6 and Figures F, G, and H.) *A Demographic and Socioeconomic Profile of Participants in the Jobs for America's Graduates Senior Year Program, Class of 2003*, Neeta Fogg and Andrew Sum, Center for Labor Market Studies, Northeastern University, Boston, Massachusetts, February, 2005, prepared for Jobs for America's Graduates, Alexandria, Virginia.

U.S. Census Bureau, 2000 Census of Population and Housing, Summary File 3, [factfinder.census.gov](http://factfinder.census.gov), accessed 10/11/2006. (Table 8.)

U.S. Census Bureau, Longitudinal Employer-Household Dynamics (LEHD) program, Local Employment Dynamics (LED), average of the third quarter of 2004 through the second quarter of 2005, ages 22 to 24. (Table 12 and Figure I.)

U.S. Census Bureau, Population Division, Interim State Population Projections, 2005. (Tables I, II, and III.)

Minnesota Department of Economic Security. (Table IV)

U.S. Census Bureau, State and County QuickFacts, [quickfacts.census.gov/qfd/states/23000.html](http://quickfacts.census.gov/qfd/states/23000.html), accessed 11/20/2006. (Table V.)

## Tables

**Table I - Interim Projections, Census 2000 and Projected 2030  
Population and Change, United States and Maine**

	<b>2000 Census Population</b>	<b>2030 Projections Population</b>	<b>Change: 2000 to 2030</b>	<b>Percent Change: 2000 to 2030</b>
United States	281,421,906	363,584,435	82,162,529	29.2
Maine	1,274,923	1,411,097	136,174	10.7

Source: U.S. Census Bureau, Population Division, Interim State Population Projections, 2005

**Table II - Interim Projections, Change in Total Population, United States and Maine,  
2000 to 2030**

	<b>Numerical change 2000 to 2010</b>	<b>Numerical change 2010 to 2020</b>	<b>Numerical change 2020 to 2030</b>	<b>Numerical change 2000 to 2030</b>	<b>Percent change 2000 to 2030</b>
United States	27,513,675	26,868,965	27,779,889	82,162,529	29.2
Maine	82,211	51,531	2,432	136,174	10.7

Source: U.S. Census Bureau, Population Division, Interim State Population Projections, 2005

**Table III - Interim Projections, Population Under Age 18 and 65 and Older,  
United States and Maine, 2000 to 2030**

	<b>2000 Under 18</b>	<b>2000 65 and Older</b>	<b>2010 Under 18</b>	<b>2010 65 and Older</b>	<b>2030 Under 18</b>	<b>2030 65 and Older</b>
United States	72,293,812	34,991,753	74,431,511	40,243,713	85,707,297	71,453,471
Maine	301,238	183,402	269,232	212,278	255,393	374,017

Source: U.S. Census Bureau, Population Division, Interim State Population Projections, 2005

**Table IV - Seven Marketable Skills**

<b>Verbal Skill</b>	Having strong reading comprehension, writing, and listening skills.
<b>Reasoning Ability</b>	Thinking critically, organizing information, and using logic to solve problems.
<b>Math Skill</b>	Using math to solve problems.
<b>Technical Design Skill</b>	Designing technical equipment, troubleshooting problems with technical equipment, or writing computer programs.
<b>Human Service Skill</b>	Understanding others' reactions and actively looking for ways to help others.
<b>Management Skill</b>	Being able to manage time, finances, materials, and employees for a company.
<b>Medicine/Dentistry Knowledge</b>	Knowing how to diagnose and treat injuries, illnesses, and diseases.

Source: Minnesota Department of Economic Security

**Table V - Racial Composition by Percent, Maine and United States**

	<b>Maine</b>	<b>United States</b>
White, Caucasian	96.1	67.4
American Indian and Alaska Native	0.6	1.0
Asian	0.8	4.2
Black, African-American	0.7	12.8
Hispanic*	0.9	14.1
Other <sup>1</sup>	0.9	1.7

\*Hispanics may be of any race, so also are included in applicable race categories.

<sup>1</sup>Other includes Multi-Racial as well as any races/ethnicities not listed.

Source: U. S. Census Bureau, State and County QuickFacts



# MAINE

## DEPARTMENT OF

# LABOR

*Labor Market Information*

*P.O. Box 259  
Augusta, Maine 04332-0259  
207-623-7900*

**John Dorrer**  
Division Director  
Phone: 623-7900  
E-mail: John.Dorrer@Maine.gov

**Dana Evans**  
State Labor Economist  
Phone: 621-5191  
E-mail: Dana.A.Evans@Maine.gov

**Robert Kelley**  
Deputy Director  
Phone: 621-5165  
E-mail: Robert.J.Kelley@Maine.gov

### **District Managers for Labor Market Information**

**North/East District:** *Craig Holland*  
Maine Department of Labor  
Labor Market Information Services  
45 Oak Street, Suite # 5  
Bangor, ME 04401-6672  
Phone: 941-3076  
FAX: 941-3077  
E-mail: Craig.Holland@Maine.gov

**Central District:** *Merrill Huhtala*  
Maine Department of Labor  
Labor Market Information Services  
45 Commerce Drive  
Augusta, ME 04330  
Phone: 621-5196  
FAX: 287-2947  
E-mail: Merrill.S.Huhtala@Maine.gov

**Western District:** *Gerard Dennison*  
Maine Department of Labor  
Labor Market Information Services  
5 Mollison Way  
Lewiston, ME 04240-5805  
Phone: 753-9045  
FAX: 753-9047  
E-mail: Gerard.Dennison@Maine.gov

**Southern District:** *Gerard Dennison*  
Maine Department of Labor  
Labor Market Information Services  
5 Mollison Way  
Lewiston, ME 04240-5805  
Phone: 753-9045  
FAX: 753-9047  
E-mail: Gerard.Dennison@Maine.gov

FAX (207) 287-2947  
TTY 1-800-794-1110  
Web site address: [www.Maine.gov/labor/lmis](http://www.Maine.gov/labor/lmis)  
E-mail address: [Imi.me@Maine.gov](mailto:Imi.me@Maine.gov)

